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The Relationship of Perceived Support to Satisfaction and Commitment for Special Education Teachers in Rural Areas

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Abstract

This study examined the relationship of work-related support to teacher satisfaction and job commitment for rural special educators. The researcher conducted a phone survey with 203 special education teachers from randomly selected rural districts in 33 states. The results suggest that several key sources of support, such as support from other special educators, are of limited availability. Teachers who reported a wider network of support, and that sources of support were helpful expressed greater levels of satisfaction and commitment to their jobs. Teacher satisfaction and commitment were related to several specific variables: (a) support from administrators, (b) support from general educators, and (c) others in the school understanding their role and sharing in the responsibility of providing services to students with disabilities.

Some of the challenges faced by the nation's schools in rural areas are the consistent shortage and frequent turnover of special education teachers (Rowland & Allen, 2007). The shortage of qualified special educators in rural settings, which make up 40% of the nation's districts, is reported to be as high as 35%, notably higher than the 11.4% nation-wide quality shortage in special education (Boe, 2006; Brownell, Bishop, & Sindelar, 2005; Johnson & Strange, 2007). Developing effective strategies to retain teachers, therefore, is an important part of any comprehensive plan to reduce teacher shortages that are a reoccurring problem in many rural school districts (Theobald, 1991). To inform such retention efforts, evidence from special education retention research is helpful. The literature suggests that positive working conditions in the form of work-related support results in increased teacher commitment (Gersten, Keating, Yovanoff, & Harniss, 2001; Miller, Brownell, & Smith, 1999).

Similarly, a small but growing body of retention research investigating sources of support for rural special educators is informative (e.g., Menlove, Garnes, & Salzberg, 2003; Nagel, Hernandez, Embler, McLaughlin, & Doh, 2006). Existing studies, however, offer a limited picture by studying only one state or rural region, or they employ small sample sizes. Consequently, further investigation on a national scale into the types of support available to rural special educators and their relationship to teacher satisfaction and commitment is an important next step to understanding the issues germane to teacher retention in rural areas. The purpose of the current study is to investigate work-related support in rural schools and to understand how that support may be correlated with outcome variables related to teachers' plans to remain in their positions as special educators. Such information may guide future rural teacher retention research efforts and benefit stakeholders (e.g., rural administrators, policy makers) interested in developing effective retention strategies in rural areas.

For over a decade, the shortage of special educators has been a primary problem facing the field of special education (Boe, 2006; Brownell & Smith, 1992). Such teacher shortages are attributed, in part, to the attrition of special educators who leave their positions at the highest rate of any teacher group (McLesky, Tyler, & Flippen, 2004). There are several factors that appear to contribute to the high attrition among special education teachers. Teacher characteristics, such as age, experience, and certification, all influence attrition, for research shows that younger, newly hired, inexperienced, or insufficiently certified teachers leave their positions at the highest rate (Miller et al., 1999; Singer, 1992; Stempien & Loeb, 2002). In rural areas, teachers without a rural background also appear to be at a high risk for attrition because of their lack of personal ties to the area (Bornfield, Hall, Hall, & Hoover, 1997). However, teacher characteristics and backgrounds are relatively unalterable factors, which is to say they are difficult to change.

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Working conditions, on the other hand, also appear to influence teacher attrition, and they are more alterable aspects of the work environment (Gersten et al., 2001). Research with special education teachers has documented that the demands of the position, as well as a need for professional support, can influence teachers' commitment (Miller et al., 1999). The lack of clearly defined roles and infrequent opportunities to exchange ideas with others are factors that contribute to special education teachers' sense of role confusion and professional isolation, thus increasing their dissatisfaction and attrition (Billingsley, 2004a; Cooley & Yovanoff, 1996).

Attrition in Rural Schools

Rural special educators are susceptible to the same attrition factors as their urban counterparts. Research conducted by Westling and Whitten (1996) with 156 rural special educators documented that a lack of recognition from colleagues, lack of support from administrators, and insufficient assistance grappling with the challenges of their position contributed to rural teacher attrition. In addition, the low incidence of students with disabilities in rural areas can mean smaller caseloads but also can require teachers to be one of few special educators in their school or district, decreasing their opportunities for support while increasing their professional isolation and attrition (Ludlow, Conner, & Schechter, 2005).

The cost of attrition is greater than the additional expense of continual teacher recruitment. New teachers require time to acclimate to a position, which can disrupt the flow of curriculum implementation. Such issues affect curriculum continuity and student achievement (National Commission on Teaching and America's Future, 2002). Reducing teacher attrition is important, therefore, not only as a means of addressing teacher shortages but also to positively influence the integrity of education provided to students with disabilities.

Special Education Teacher Retention

Several large-scale national research projects have identified factors related to work-related support as important to special education teacher retention. These studies confirm that special educators who are involved in collaborative relationships with other special educators report lower levels of professional isolation and work-related stress. The informal guidance and exchange of ideas with other special educators increased teachers' reported levels of confidence in their ability to effectively provide services to students with disabilities and also increased their reported job satisfaction (Billingsley, 2004a; Cooley & Yovanoff, 1996; Westling, Herzog, Cooper-Duffy, Prohn, & Ray, 2006). In addition, opportunities for conversations with general educators and administrators increased the amount of support that special educators reported, enabling them to feel valued by their colleagues. These exchanges permitted teachers to define their roles and responsibilities while decreasing conflicting role expectations and resulted in reduced levels of stress, increased levels of job satisfaction, and, of particular interest, increased commitment (Billingsley, 2004b; Gehrke & Murri, 2006; Gersten et al., 2001). What has received less attention in the literature are the critical features of work-related support, specifically for special educators in rural areas, and the relationship between that support and job satisfaction and commitment.

Rural Special Education Teacher Retention

Several studies investigating rural special education teacher retention have identified teacher support as central to teachers' job commitment. Menlove et al. (2003) found that work-related support was important to 812 committed, veteran, rural special educators in Utah. More than two-thirds of the teachers indicated a high degree of support from other special educators and a positive working relationship with general education teachers and administrators. Researchers found that this support assisted these committed teachers in handling the work-related stress of their positions. Similarly, Gehrke and McCoy (2007) collected survey data from 10 beginning special educators, 3 teaching in small town and rural locales. Overall, those teachers who intended to remain in special education had positive experiences with mentors as well as a diverse and broader network of professional support.

Other researchers have documented how schools that are successful at meeting the challenge of teacher retention have capitalized on the positive qualities found in small, rural school communities. Nagel et al. (2006) investigated 13 effective rural schools with few retention difficulties. The researchers found that inclusive teams of general educators, special educators, related service providers, and administrators all worked together during weekly planning meetings to provide services for students with disabilities. The researchers concluded that the cooperation and communication between educators and administrators was essential. The close-knit nature of the rural school community translated to an in-depth understanding of the students and a pride in supporting the students and each other.

The promising findings of the research in rural areas suggest that rural schools may be in a unique position to benefit from the qualities of cooperation and collaboration fostered in rural communities. Research, on a national scale with a large sample size, investigating the sources of support available to rural special education teachers seems not only warranted

but also critical, given the possible relationships between work-related support and the satisfaction and commitment of special education teachers in rural districts. This study posed the following research questions: (a) What types of professional work-related support are available to rural special educators? (b) What is the extent of the support special educators received from available sources? (c) What are the perceived levels of job satisfaction and job commitment for rural special education teachers? (d) What is the relationship between professional support and teachers' levels of satisfaction and commitment? and (e) Does a relationship exist between job satisfaction and job commitment for rural special educators?

Method

Special education teachers who were employed in rural districts over the span of 2 school years (i.e., 2008–2009 and 2009–2010) provided information about their personal characteristics and working conditions, as well as their perceptions of support, satisfaction, and commitment to their special education positions. The following discussion details the methods used for sample selection, instrument development and implementation, and data analysis.

Sample Selection

To identify teachers, the researcher first identified rural districts in one of three ways: (a) eligible for the Rural Education Achievement Program (REAP) in 2006 by the Department of Education, (b) identified by a National Center for Education Statistics (NCES) rural locale codes as 7 or 8, or (c) identified by NCES urban-centric codes as 41, 42, or 43 (i.e., rural fringe near an urban cluster, distant within 25 miles of an urban cluster, and remote). This identification process yielded a universe of 8,646 rural districts. Next, a computer selected a random sample of 10% of these districts. The researcher eliminated districts that were not traditional school districts, such as hospital schools, resulting in a pool of 585 districts (Berry, Petrin, Gravelle, & Farmer, 2011).

The researcher then randomly selected a subset of 55 districts so that detailed personal interviews with individual teachers could be conducted. The researcher identified all teachers responsible for special education services in each district, creating a pool of 522 teachers in 33 states. These districts were either (a) eligible for REAP's Small Rural School Achievement Program and located in sparsely populated areas (36%), (b) eligible for REAP's Rural and Low-Income Schools Program (20%) with 20% of the students living below the poverty level, or (c) located in fringe, distant, or remote rural areas (44%). National percentages of districts in these categories are 52%, 14%, and 33% respectively (Berry et al., 2011).

Teachers received a letter explaining the goals of the study. The researcher imposed a cap of 10 teachers per district to prevent larger districts from being over-represented in the sample. The researcher found 159 teachers were ineligible for participation for 1 of 2 reasons: (a) they did not currently hold a special education teaching position (e.g., administrator, no longer employed at the school) or (b) the cap for their district had been reached. Interviewers did not directly contact 120 teachers by telephone. In total, 203 special education teachers participated in the study for a participation rate of 84%, calculated by dividing the number of teachers who participated by the number of eligible teachers who interviewers were able to contact (i.e., 203/243). Teachers received 20 dollars for participating in the research (Berry et al., 2011).

Teacher and Position Characteristics

The teachers had an array of experience, credentials, and backgrounds. The average teacher's age was 43 years; half were in their 30s and 40s, and 33% were over the age of 50. Teachers had been working in special education an average of 13 years and had been teaching in their positions an average of 8 years. Roughly half had been teaching less than 5 years; 30% were in their first 2 years. Most teachers taught full-time in either a resource room (53%) or an inclusionary setting (22%). The majority of teachers (80%) had fewer than 20 students on their caseloads. One third of the teachers graduated from programs that required at least 25 credits in special education, and 64% held advanced degrees. The majority of teachers held their states' highest level of certification (63%). As was characteristic of the teachers in other rural samples (Bornfield et al., 1997; Davis, 1992), the majority of teachers were white (92%), female (87%), and long-term residents of their rural area; 48% were teaching in a school located in the area where they grew up, and 62% had been living in the area for 16 years or longer (Berry et al., 2011).

Survey Development

The development of the survey followed a rational approach (Kornhauser & Sheatsley, 1951) by incorporating results from a focus group, a literature review, expert reviews, and a pilot study. Topics from the focus group, literature review, and instruments used in previous rural special education retention research yielded a bank of survey questions, which were sent to six national experts for review. The researcher piloted a draft of the survey with a group of 10 special educators from three rural districts. The researcher considered reviewers' and pilot teachers' comments in the development of the final instrument. These processes, used in prior research to investigate support and commitment (Whitaker, 2000), ensured

that the final version of the instrument contained appropriate content to measure the constructs under investigation and produced information that reflected the views of special education teachers in rural areas (Berry et al., 2011).

Survey Questions

The researcher divided 34 survey questions into four broad categories identified in the literature as central to special education teacher retention: (a) teacher and position characteristics (10 items), (b) work-related support (19 items), (c) teacher satisfaction (7 items), and (d) commitment (4 items). Several questions were comprised of multiple items. Sample survey questions are provided in Table 1. Questions used a Likert-type scale, multiple option, or open-ended format, determined by the type of question being asked and standard practice for survey items (Bradburn, Sudman, & Wansink, 2004).

Likert-type scale. The researcher utilized a 4-point Likert-type rating scale throughout the survey. The brevity of the 4-point scale avoided lengthy and confusing gradations and allowed participants to listen to four choices and select a response to reflect their positions (Lozano, Garcia-Cueto, & Muniz, 2008). A similar scale, or a version thereof, has been used in prior research when measuring the constructs in question (e.g., Menlove et al., 2003; Miller et al., 1999; Westling & Whitten, 1996; Whitaker, 2000). Thus, the survey's uniformity with other surveys from comparable literature allowed for consistency and comparison with previous research.

Multiple option and open-ended questions. Multiple option formats required the respondent to select one option from a list of possible choices or select as many options as were appropriate. Several options were open-ended, and teachers could volunteer responses (e.g., What is your age?).

Table 1.

Sample Survey Questions

Support
To what extent do you agree with the following statement: My building administrator understands my role and responsibilities with respect to the students on my caseload. *Strongly Agree, Agree, Disagree, Strongly Disagree*
To what extent do you agree with the following statement: The responsibility for providing services to students on my caseload falls entirely on my shoulders. *Strongly Agree, Agree, Disagree, Strongly Disagree*
Overall what source of work related support has been most supportive to you professionally in your role as a special educator?
Satisfaction
Overall, how satisfied are you with the instructional aspects of teaching and delivering services to your students (e.g., instruction in specific skills and modifying materials)? *Very Satisfied, Satisfied, Dissatisfied, Very Dissatisfied*
To what extent do you agree with the following statement: I find real enjoyment in my work most of the time. *Strongly Agree, Agree, Disagree, Strongly Disagree*
Commitment
For the 2010-2011 school year, what are you expecting to do? (a) staying in my current position; (b) staying in special education but in a different position in my school; (c) staying in special education but in a different position in a different school; (d) continuing to teach in my current school but no longer in special education; (e) continuing to teach but in a different school and no longer in special education; (f) leaving teaching altogether.
To what extent do you agree with the following statement: If given the chance to do it all over again, I would become a special education teacher. *Strongly Agree, Agree, Disagree, Strongly Disagree*
To what extent do you agree with the following statement: If given the chance to do it all over again I would teach in a school like the one I am in now, in a rural area. *Strongly Agree, Agree, Disagree, Strongly Disagree*

Interviewers recorded the teacher's responses and validated the accuracy of the response by reading the typed answer back to the participant.

Survey Categories

Teacher and position characteristics. The researcher collected data on the teacher's age, experience in the current position, numbers of years teaching special education, number of years living in a rural area, and certification status. In addition, the researcher obtained information on the characteristics of the teacher's position (e.g., case load, grade level). These characteristics have been identified as related to teacher attrition and retention (Billingsley et al., 2002; Miller et al., 1999; Stempien & Loeb 2002). Ten items collected data on teacher and position characteristics.

Support. Teachers were asked to identify their sources of work-related support from a list of 16 professional sources (e.g., Menlove et al., 2003; Westling et al., 2006). The construct of support included ranking the degree of helpfulness for each support source on a 4-point Likert-type scale (e.g., 0: not available or not helpful source of support to 3: very helpful source of support). The researcher measured the variable of overall support by summing the degree of helpfulness for all sources of support. In addition, teachers named the most supportive source of support as well as sources of support that would be helpful if they were available.

Additional items measuring support included teacher agreement with four statements that assessed their relationship with administrators and general education teachers (Miller et. al., 1999; Westling & Whitten, 1996). The researcher asked teachers if they shared the responsibility for educating students with disabilities with others in their school. The relationship between shared responsibility and teacher commitment has been discussed in the literature (Nagel et al., 2006); however, survey items exploring this relationship have not been developed in previous research.

Satisfaction. Teachers provided a rating of their satisfaction on a 4-point Likert-type scale (e.g., 1: strongly disagree to 4: strongly agree) for four items: (a) the instructional aspects of teaching and delivering services to students with special needs, (b) the non-instructional aspects of their jobs (e.g., paperwork, other assigned duties; Menlove et al., 2003), (c) their enjoyment of teaching, and (d) whether they would recommend the profession to someone else. As an additional measurement of satisfaction, teachers rated their perceived levels of efficacy on three items (i.e., they could meet the academic and behavioral needs of their students, and they found the size of their caseload manageable).

Commitment. The researcher asked teachers about their career plans for the following year and for 5 years in the future. Teachers chose from several possible options (Westling et al., 2006), and the researcher ranked their choices according to the retention value to their school and the field (i.e., 6 = stay in current special education position, 5 = stay in special education in current school, 4 = stay in special education in different school, 3 = stay in education in school, 2 = stay in education in different school, 1 = leave teaching). The researcher aggregated choices to quantify the teachers' intent to stay. The researcher also assessed commitment through ratings on two items measuring teachers' desire to choose the profession (Miller et. al., 1999) and their rural school again.

Survey Implementation

Seven interviewers administered the instrument over a period of 9 months using phone interviews designed to take 40 min to complete. Interviewers participated in 2 days of training. The project director and the principal investigator conducted observations of all interviewers during the training period and again at 1, 2, and 5 months following the start of the study to check for interviewer drift. They obtained a 98% accuracy level for survey administration and response recording by all interviewers. In addition, the principal investigator and the research team held weekly meetings. The team discussed any individual interpretation of survey content or response coding to ensure consistency across interviewers (Berry et al., 2011).

Instrument Validity and Reliability

The researcher established a measure of construct validity by the extent to which the current measure performed in a way that was consistent with theoretical expectations (Carmines & Zeller, 1979). In addition, the researcher computed Cronbach's alpha for the items in each construct to establish the relationship between multiple indicators: (a) overall level of support (alpha = .77), (b) intent to stay (alpha = .50), (c) willingness to choose the profession again (alpha = .59), (d) satisfaction with aspects of the job (alpha = .65), and (e) teacher perceptions of efficacy (alpha = .75). An alpha of .6 or higher indicated that items were measuring the same underlying construct (Gersten et al., 2005).

The researcher established a measure of instrument reliability during a pilot administration of the questionnaire through the analysis of responses on items that were consistent for all teachers from the same district. The overall measurement for this indicator of instrument reliability was 80% as calculated by dividing the total number of agreements between teachers within the district by the number of agreements plus disagreements.

Data Analysis

The researcher computed descriptive statistics on the frequency and variety of teacher responses to answer several research questions. She recorded teacher responses in a computer database to insure the accuracy of data tabulation. The researcher ran multiple linear regressions using the SPSS statistical package to test the relationships between the explanatory variables of teacher characteristics and teacher support and the outcome variables of teacher satisfaction and commitment. She explored the relationship between teacher satisfaction and teacher commitment. The researcher used a mean substitution for missing data (< 5%) rather than exclude the teacher entirely from the regression analysis. She indicated teachers for whom an item was irrelevant (e.g., there were no other special educators in their building) with a dummy variable indicating the lack of opportunity for this type of support. The analysis of the dummy variable was insignificant in all cases. Other support variables of interest (i.e., special education team meetings, grade-level meetings, other special education teachers in the district, online contacts) were frequently (17-45%) unavailable and, therefore, included in the aggregated measurement of overall support but excluded from the analysis of independent support sources. Bivariate correlation coefficients (Pearson's *r*) established the relationships between the variables.

Results

To understand the types of support rural teachers received in their roles, this study investigated the sources of work-related support identified by the teachers as available and helpful to them. The researcher measured the extent to which teachers stated they shared the responsibility for educating students with disabilities, as well as teacher satisfaction, and commitment. The significant correlations ($p < .05$) found between these variables of interest are reported.

Sources of Work-related Support

Table 2 presents the support sources named by the teachers. The most available sources of professional support were administrators, general educators, related service providers, and parents. Less available sources of support were other special educators and team meetings. Teachers most frequently reported other special educators in the building as the most helpful source of work-related support. Half of the teachers identified sources of support that were currently not available but would be helpful to them if they were available. The most frequently mentioned were grade-level and special education team meetings and online contacts with other teachers.

Table 2.

Sources of Available, Most Helpful, and Desired Teacher Support

Sources of support	Available to teachers	Most helpful	Unavailable but desired sources of support
Principal	99%	10%	–
General education teachers	98%	9%	–
Related service providers	98%	10%	–
Parents	97%	–	–
Special education director	97%	14%	–
Professional development	96%	–	–
Other special educators in building	88%	34%	–
Special education team meetings	83%	–	5%
Other special educators in the district	83%	–	–
Grade level team meetings	66%	–	8%
Online contacts	55%	–	6%

Note: Sources named by less than 5% of the teachers are noted with a dash (–).

Shared Responsibility

Half of the teachers indicated that they shared with others the responsibility for educating students with disabilities. Teachers described a team approach where general educators, related service providers, administrators, and special educators worked together to provide services. As one teacher explained, "It is more of a collaborative effort. I have a great support system with paras, related service providers, the general education teachers, and parents. It's not all on me."

Levels of Teacher Satisfaction and Commitment in Rural Schools

Satisfaction. The majority of teachers (89%) said they were satisfied or very satisfied with the instructional aspects of their position. However, 67% of teachers indicated they were dissatisfied or strongly dissatisfied with the non-instructional aspects of teaching. The majority of these teachers (43%) mentioned the paperwork.

Commitment 1 year and 5 years. While most teachers (92%) planned to stay in special education positions in their rural schools the following year, 58% were planning to stay in 5 years. Some teachers were planning to leave teaching altogether (3%) or retire (13%). However, 5% were planning to teach in their school in general education or other positions (e.g., media specialist), and 20% planned to teach in positions in nearby districts.

Willingness to choose over again. Ninety percent of teachers either agreed or strongly agreed that, if given another chance to choose a profession, they would be a special education teacher. Ninety-three percent of the teachers would teach in a school located in a rural area again.

The Relationship of Work-Related Support to Satisfaction and Commitment Variables

Table 3 provides an overview of the significant correlations between support and the outcome

Table 3.

Significant Bivariate Correlation Coefficients (Pearson's r) Between Support and Satisfaction and Commitment

		Satisfaction		Commitment	
Sources of support M (SD)		Teacher satisfaction 12.3 (2)	Perceived efficacy 9.2 (2)	Intent to stay 9.8 (3)	Would choose profession again 7.0 (1)
Overall support 37 (15)		.27	.17	–	.24
Special education director 3.5 (.7)	Helpful	.25	.22	.10	.11
	Understands role	.32	.28	–	.16
Principal 3.3 (.9)	Helpful	.25	–	–	.19
	Understands role	.14	.15	–	.16
General education teachers 2.9 (.8)	Helpful	.19	.16	–	.19
	Understands role	.29	.25	–	.23
Related service providers 3.4 (.7)	Helpful	–	–	.14	–
Other special educators 3.5 (.7)	Helpful	–	–	.13	.11
Sense of shared responsibility 2.3 (.9)		.18	.19	.14	.16

Note: Non-significant correlations ($p > .05$) are noted with a dash (-).

variables of satisfaction and commitment. Consistent with the guidelines of Glass and Hopkins (1996), the reported correlations would be considered in the small to moderate range. Teachers' satisfaction with the instructional and non-instructional aspects of their jobs along with their reported ability to handle the behavioral and academic needs of the students on their caseloads were related to the availability of support from a wider network of support sources (r = .27) as well as the helpfulness of that support (r = .17). In addition, teachers reported higher levels of satisfaction when helpful support was provided from their special education administrators, building administrators, and the general education teachers (r = .25, .25, .19 respectively) and these colleagues understood their role and responsibilities (r = .32, .14, .29). Similarly, teachers reported being able to manage the needs of the students on their caseloads more effectively when special education (r = .22), and general education teachers (r = .16) provided helpful support and when administrators and general education teachers understood their role and responsibilities (r = .28, .15, .25). Teachers' levels of satisfaction (r = .18) and efficacy (r = .19) also increased when teachers shared the responsibility for their students.

The commitment variable of intent to stay was related to the helpfulness of the support from other special education teachers (r = .13), the special education director (r = .10), related service providers (r = .14), and whether the special educator felt they shared the responsibility of educating students with disabilities (r = .14). In addition, the researcher found significant negative associations between teacher and position characteristics and teachers' intent to stay. As caseload size (r = -.19), the teacher's age (r = -.18), years living in their rural area (r = -.13), and years of experience (r = -.15) increased, teachers' intent to stay decreased. Teachers were more likely to report they would choose their profession and teach in a rural school again if they had a broader network of helpful support (r = .24). The researcher found the strongest relationships were for support from administrators and general education teachers, particularly when the general educators understood the special educator's role and responsibilities (r = .23) and the teacher had a shared sense of responsibility (r = .16). A note of caution interpreting these results is suggested here, given the analysis (alpha = .50) of the 6-point scale that comprised this construct.

Table 4 presents a summary of the reduction in variance using a model that included overall support to explain teachers' satisfaction and commitment over a

Table 4.

Summary of analysis of variance between teacher and position characteristics and overall support with significant satisfaction, efficacy, and commitment variables

Teacher satisfaction							
Source	SSE	df	MSE	F*	*p*	*r*	r^2
Regression	53.00	1	53.00	18.79	.001	.31	10
Residual	538.73	191	2.82				
Total	591.73	192	3.08				
Perceived efficacy							
Source	SSE	df	MSE	F*	*p*	*r*	r^2
Regression	21.54	1	21.54	8.15	.01	.21	.04
Residual	504.80	191	2.64				
Total	526.35	192	2.74				
Teacher willingness to choose the profession over again							
Source	SSE	df	MSE	F*	*p*	*r*	r^2
Regression	15.68	1	11.91	11.91	.001	.31	.09
Residual	251.34	191	1.32				
Total	267.01	192	1.39				

model comprised of teacher and position characteristics. Concerning the question of teacher satisfaction, there was a significant relationship (r = .31) between overall support and teacher satisfaction ($F^*_{(1,191)} = 18.79$, $p < .001$). The r^2, or proportional reduction in error, was 10%, suggesting that a model including overall support more effectively explained teacher satisfaction when compared to a model that included just teacher and position characteristics. Overall support was also significantly associated with teacher efficacy ($F^*_{(1,191)} = 8.15$, $p < .01$). Based on these findings, there was a significant relationship (r = .21) between overall support and teacher efficacy.

When examining teachers' intent to stay, a model that included overall support reduced the proportional amount of variance by 10%. However, when controlling for the influences of teacher and position characteristics, the researcher found a significant relationship between support and intent to stay ($F^*_{(1,191)} = 2.34$, $p = .13$). However, teachers' willingness to choose the profession over again was significantly associated (r = .31) with overall support ($F^*_{(1,191)} = 11.91$, $p < .01$). A model that included overall support more effectively explained teacher willingness to choose the profession over again by 9%.

The Relationship Between Satisfaction and Commitment

Consistent with findings in previous research (Billingsley et al., 2002; Gersten et al., 2001; Whitaker, 2000), levels of teacher satisfaction were positively correlated with teacher commitment. Small but significant relationships were evident between satisfaction (r = .14) and perceived efficacy (r = .15) and teacher intent to stay. Larger significant relationships existed between the satisfaction variables (satisfaction r = .62; perceived efficacy r = .25) and the teacher's willingness to choose the profession again.

Limitations

There are several notable limitations to the reported results. Participants were all volunteers, and the willingness of a certain set of teachers to respond to recruitment efforts may have created a bias in the sample. The structure of the survey questions may have influenced the data collected. Interviewers asked teachers to reduce their interpretation of complex constructs, such as satisfaction, to a Likert-type scale. The brevity of the response may have inadvertently encouraged teachers to underestimate or overestimate their reply. One construct, intent to stay, had a lower measure of construct validity. In addition, the researcher did not include variables with a high percentage of unavailability in the analysis of the independent support sources. This limited the picture represented by the analysis but also reflects the inconsistent availability of some support sources in rural areas. Finally, the current study focused on teacher perceptions of support, satisfaction, and commitment rather than actual teacher retention data.

Discussion

Using survey research with a randomly selected national sample of special education teachers, the current findings reveal some significant relationships between professional support, teacher satisfaction, and job commitment. The availability and helpfulness of specific sources of support were central to these relationships. The following discussion summarizes the main findings of the research, directions for future research, and related implications for administrators and educational leaders in rural areas.

The results of this study raise some concerns for rural administrators, as only half of the teachers surveyed planned to remain in a special education position in their rural school over the next 5 years. This finding can be partially explained by the fact that a third of the teachers were nearing the age of retirement and half were teaching in the time period for greatest attrition: less than 5 years in the position (Singer, 1992). However, these teachers did not appear to be ones that rural administrators would want to lose. Generally speaking, the teachers in the sample were qualified and committed to their rural areas. Most had lived many years in their rural districts, if not their entire lives. However, it is clear that retention strategies will be necessary to retain these teachers beyond the 5-year mark.

The current research sought to replicate and extend the results of prior retention research (e.g., Billingsley, 2004a; Cooley & Yovanoff, 1996; Westling et al., 2006) to special education teachers in rural areas. The results of the current study provide convincing evidence for the existence of a significant relationship between overall teacher support and teacher satisfaction, teacher perceived efficacy, and teacher willingness to choose the profession again. In addition, satisfaction variables were positively correlated with both commitment variables, further strengthening the evidence for a positive relationship between work-related support and rural special education teacher commitment.

Taking demographic variables, training, and other teacher and position characteristics into account, the researcher found interesting and significant associations between four specific explanatory variables of support and teacher commitment. She found significant relationships between teachers' intent to stay and the helpfulness of support from (a) the special education director, (b) related service providers, (c) other special education teachers, and (d) a sense of a shared responsibility between the special education teacher

and others in their schools. Teachers recognized other special educators in the building as the most helpful source of professional support. The analysis demonstrated that teacher willingness to teach in a rural school again was related to the same four variables, along with a work environment characterized by others in the school who understood the special education teacher's role and responsibilities.

Some teachers reported a limited availability of support sources. Other special educators were not always a readily available source of support for teachers in rural areas. Support structures, such as special education team meetings and grade-level team meetings, were also not always available. Mirroring a recurrent theme found in special education research (Cooley & Yovanoff, 1996; Gersten et al., 2001; Miller et al., 1999), the rural special educators in this study reported limited opportunities for collaboration with other educators and a desire for additional opportunities to talk with their special education and general education colleagues.

In addition, since the level of teachers' satisfaction with their positions was found to correlate with teachers' levels of commitment, working environments that can assist teachers in reporting higher levels of satisfaction with their jobs and an increased ability to meet the needs of the students on their caseloads are work environments that are more likely to have teachers who report increased levels of commitment. Teacher satisfaction and reported effectiveness were significantly correlated with four predictor variables: (a) the helpfulness of support from administrators, (b) the helpfulness of general education teachers, (c) whether the administrators and general education teachers understood the special educators' role and responsibilities, and (d) when teachers reported a shared responsibility for the education of students. These findings corroborate the results of previous research with special education teachers (Billingsley, 2004a; Gersten et al., 2001), and they underscore the importance of clearly defined roles for general and special educators. The results substantiate the importance of a shared sense of responsibility when considering factors related to teacher commitment.

New Directions

The results draw attention to the importance of a variable unexamined in prior research: the teacher's sense of a shared responsibility when educating students with disabilities. As teachers' sense of a shared role increased, the levels of reported satisfaction and commitment also increased. Future research is needed to focus specifically on the contributors to a teacher's sense of shared responsibility. In addition, analysis identified general education teachers as playing a central role in rural special education teacher satisfaction, perceived efficacy, and commitment, whereas previous research has highlighted the importance of support from the other special educators in the building (Billingsley, 2004a; Gersten et al., 2001; Westling et al., 2006). One possible explanation may be that, in rural and small schools, the opportunity for support from other special education teachers is more limited, whereas support from general educators is more available: 75% of the teachers worked with students who received their education primarily in general education classrooms. The availability and necessity of contact with general education teachers in rural schools may be the catalyst for an important relationship with rural special educators' sense of support and commitment. Future research may investigate the factors that contribute to this potentially supportive relationship.

Implications

Supportive relationships, particularly those with administrators and general education teachers, appeared to play a critical role in these rural teachers' reported levels of satisfaction and commitment. A work environment, where special educators felt others understood their role and there was a shared responsibility for students with disabilities, was related to teacher satisfaction and perceived efficacy and, therefore, commitment. As a result of these findings, several recommendations seem appropriate for administrators and educational leaders interested in strategies to improve teacher retention in rural areas.

Administrators will want to provide opportunities for the exchange of personal and professional support by promoting the relationships noted above within the school community. Opportunities to create a supportive school culture might include, but are not limited to, special education and grade-level team meetings, school gatherings, co-teaching, and mentoring. Through release time or flexible scheduling, administrators can help teachers create time to problem-solve student-related issues and support each other.

As roles and responsibilities of special educators are increasingly moving to inclusive settings, in-service training and coaching in inclusive practices and co-teaching may be helpful in assisting teachers to define respective teaching roles and responsibilities. Such training has the potential to create a meaningful sense of a shared responsibility in the delivery of services to students with disabilities (Scheeler, Congdon, & Stansbery, 2010). In addition, special education teacher preparation programs do not always include opportunities to develop critical collaboration skills (Brownell, Ross, Colon, & McCallum, 2005). Such programs, especially those targeting rural areas, need to

emphasize the skills and dispositions necessary to collaborate and consult with general educators so special educators are comfortable with, and can reap the benefits from, interactions with their general education colleagues.

Conclusion

This study investigated important relationships between teacher support, satisfaction, and commitment for special education teachers in rural areas. The results impart the central conclusion that teachers who can identify extensive and helpful support networks, have other teachers and administrators who understand their roles, and share in the responsibility of delivering services to students with disabilities are also teachers who are more apt to report increased commitment. These results help to explain how teacher satisfaction and commitment might be related to work-related support. Such collaborative and supportive relationships are alterable elements of the work environment and are within the school administrator's locus of control. Therefore, they can be encouraged to develop, and, once established, they can be supported to continue. It is hoped that the conclusions of this study will help address issues related to teacher attrition in rural areas and inform policies that assist educational leaders in the retention of rural special education teachers.

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